furniture. These objects are not numerous and reflect the primitive life led by the Tuareg.

On the left side of the tent is generally found the goatskin water bag, hung on two wooden stakes placed in a V-shape. An old piece of cloth often covers it to protect it from the sun. The waterskin is often empty, for the Tuareg are not very farsighted. When there is water, they drink; when /229/ they are out of it, they stay there waiting a half day until the Iklan get back from the well.

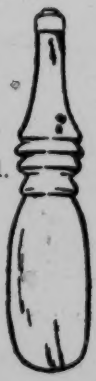

Fig. 28.
Tent shovel.

When a traveler passes by, he is most generally assailed with demands for water, while he himself often hoped to find some in the camp.

In front of the door and close to all the tents is an enormous wooden mortar and its pestle, in which the servant girl crushes millet and dates. By searching a bit in the tent or in the shelter used as a kitchen, one may find two or three hemispheric wooden dishes destined to hold food and two or three conical bowls serving as drinking vessels. Hanging on one of the outer stakes of the tent are a wooden milking vessel, an esparto winnowing basket for sifting millet flour, serving at the same time as a dish cover, one or two little esparto mats which can serve the same purpose, and finally a few wooden spoons. Each mistress of a tent has a little

264 [415] The Tuareg use spoons. The use of this implement is peculiar to them, for their Arab or Negro neighbors eat with their hands. The custom must be related to the wearing of the veil, which they do not take off to eat and which prevents them from putting their [182 291] hands full of food to their mouths. They carry food to their mouths while slightly holding up the ends of their veils.

[271] 272 For beverages they drink only water, whether it is clean or polluted, and milk.

For half a century they have had the habit of drinking green tea in the Arab manner; they aromatize it with mint or some perfumed plants of the Ahaggar, /238/ chih (Artemisia herba alba) in particular. Coffee, which was formerly much used by them, is now [757 178] taken mainly as a medication to calm violent coughs or stomach aches.

28% If we now seek consumer goods taken as stimulants or narcotics, we see that the Tuareg know only tobacco, which they chew or take as snuff.

Smoking is not one of their customs. The young men who are [177] in contact with the French like to beg a cigarette, but it is simply in the spirit of imitation.

Duveyrier, however, has said that the Tuareg smoke. Was this, 114 perhaps, the fashion among the Tuareg who visited Ghat? Before 276 him Barth wrote that all riverain people living along the Niger loved to smoke. "It is very seldom that they leave their pretty little clay pipes, and all the Rouma, like the Tuareg, cover their mouths when smoking, so that all one sees is a pipe bowl coming out of the shawl which covers the face." (1)

1. Voyage en Afrique, vol. IV, p. 137.

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

133 Massif resembles Ahaggar, but it is on the whole much more level with broader valleys and in between
131 the lower mountains there are clayey plains. Immediately east of the Massif is the very extended sandy desert which is uninhabited. Further south than Adraɣ-n-Foras and Ayr there are no considerable mountains. Between the two massifs are the plains of Tamesna and Talak which continue into the plains of the Sudanese savannah.

Tuareg country consists predominantly of rocky mountains and flat, extensive plains of gravel and stone. This configuration is basic to our understanding of Tuareg economy as will become clear when we have outlined the characteristic features of climate.

132 Tuareg country is very hot in summer – so hot that even the nomads born and bred in the country suffer much from the heat at that season. The hottest months are May, June (farthest south) and July (farthest north). During these months temperature may exceed 50° centigrade, and is on average 30°–35°, or higher. In the uppermost mountain zone of Ahaggar nights are comparatively cool even in summer, while in the lower country there is often little difference between day and night temperatures. This is true in particular when, as often happens in summer, the sky is overcast during the night and consequently there is little radiation of the heat absorbed by rocks and sand in daytime. The day temperature in summer is normally higher than the temperature of the human body, and the temperature of sand and rocks will rise to 60°–70°. Travelling is extremely hard under such conditions,
484 and most people spend the day in the shade of rocks and trees, sleeping and drinking water of which
271 an adult person consumes 8–10 litres a day. Violent winds are common in the Sahara most of the year and in particular in the daytime; in summer these winds are usually very hot and add considerably to the discomfort of the climate, as do the numerous flies.

The country of the Northern Tuareg has a rather continental climate characterized by great fluctuations of temperature during the year. Although Tuareg suffer from heat in summer, they do not generally complain much about it, and they consider the comparatively cold winter much worse than the hot summer. In winter, temperature in the country of the Northern Tuareg averages about 10°. The absolute minimum temperature however is very much below this. Thus in Ahaggar the village of Tamanrasset (1400 m) has in January an average temperature of 11,7 , but an absolute minimum of -6,6'. Frost is very common during winter nights, and even snow may fall in the higher parts of Ahaggar at that time of the year. In the country of the Southern Tuareg frost may also occur, but in Southern Ayr around Agadez frost is said to be very rare and snow is unknown; the winter period
511 in the south is on the whole milder than in the north, where the changes between relatively cold and
1164 very hot temperatures, allied with inadequate dwellings and clothes, are responsible for pneumonia and similar diseases, which give rise to frequent deaths – especially among children.

The most important climatic distinction between the countries of Northern and Southern Tuareg is due to differences in the annual precipitation as will be seen from the following figures (in m/m) for the annual rainfall 1931–1945 in the territories of seven Tuareg groups:—

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

Fig. 98. A slave watering goats by means of the leather bucket called *aga*. Water is drawn from a well and poured out into a hole dug in the clayey ground. The goat standing to the left is sheared – a token of the summer season. Tasilit-n-Ajjer.

conditions, and herdsmen, who live with camelherds far away from camps and wells subsisting on camel's milk, do not consider water necessary. Should domestic animals have eaten salt or salty plants they are very eager for water even in winter. When I lived in Ahaggar with my camels during the winter 1954/55 they had rightly to be watered every ten days, but in regions where they fed mainly on saliferous plants they had to be watered more frequently. However, domestic animals must not be watered too often as this would make them slow and emaciated, and a camel must not be worked too hard the day after it has been watered.

Tuareg camps are always found around wells, pools, or other types of water places for which there is a large vocabulary. But the Tuareg never camp too close to water places where there is little pasture, many foreigners and consequently little peace. The distance from camp to water place varies, but is very frequently 1–3 kilometres. During the rainy season (*akasa*) water is very aundant all over Ayr, but outside this period conditions of water supply for human beings and livestock are more favourable in the north than in Ayr, where water most of the year must be drawn from wells. To raise water the Tuareg use a leather bucket known to the Ahaggar Tuareg as *aga* (Fig. 97–98). The water drawn for the animals is poured out into a hole dug in clayey soil, or into a hole covered with a piece of skin or leather known in Ahaggar as *tafarawt*. This skin is nowadays frequently substituted by canvas (cf. Fig. 99). Where water is scarce and must be drawn from narrow wells, as in Ayr during the summer season, the watering of flocks and herds gives rise to frequent quarrels between pastoralists. For though the right to the use of wells is free to all there are many disputes and fights frequently

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

camels. This blood never constitutes a proper dish to the Tuareg. They bleed camels to drink their blood only when they lack water on journeys in the desert. Bleeding is done according to the method described above, and the blood is collected in a drinking bowl. But the Ayr Tuareg say that they work up the mass of blood with the fingers with the result that the upper part of the amount of blood becomes more liquid, though it is always red in colour.

The Tuareg use the following implements to make cereals or other vegetable products into flour:—

(1) A large wooden mortar (*tindé*) with a heavy pestle (*ẓheṛen*) (Fig. 177). It is used in all camps and villages of Ahaggar, Tasilé-n-Ajjer, and Ayr, and is in fact known all over Tuareg country. It is used mainly for pounding millet and sorghum, but it is also employed for pounding other cereals, including certain wild seeds, and for dates, cheese, meat, locusts, and the like. These large wooden mortars are manufactured by the blacksmiths of Southern Tuareg country, including Ayr, where most Northern Tuareg obtain their mortars. Among the Northern Tuareg there are also other mortar types. A small mortar which like the former rests on a foot and is known by the same name (*tindé*) (Fig. 178), is used mainly by sedentary agriculturists for pounding rock-salt, dried tomatoes, tobacco for chewing, and other plants or materials to be used in small quantities. Another type of mortar without a foot and known to the Northern Tuareg as *akabar*, or *takabart*, (Fig. 176) is found mainly among pastoralists who use it on journeys for pounding millet.

(2) A saddle quern (*tehunt*) (Fig. 179), which consists of two natural and in general unfashioned stones, is found in most camps of the Northern Tuareg. This constitutes the only grinding implement for wheat, barley, and certain wild seeds among the *Kel Ajjer*. The stones used for saddle querns are sharpened at intervals with a hard stone or some other hard object (*tasettekut*) in order that they may grind effectively. A simple saddle quern (*asar*) is also known to the Ayr Tuareg, but it is less common there than in the north.

(3) The handmill (*tasirt*) (Fig. 181) is not a traditional implement of Tuareg culture. It is widely known all over Northern Africa both by Berbers and Arabs, by sedentary peoples and nomads living in black tents. It has been introduced to Ahaggar mainly by the immigration of the Arabic speaking Harratin (Laggaren) of Tidikelt,

Fig. 169 a–c. Pieces of butter-milk cheese (*awles*, pl. *twlsan*).
a. Ahaggar, *Harratin of* Abalessa. Dimension: 0.066–0.068 m in diameter, 0.022 m thick. (N.M. G. 5816).
b. Ahaggar, the *Afuh-en-tehlé* tribe. Dimension: 0.062 × 0.022 m. (N.M. G. 5817b).
c. Ahaggar, the *Afuh-en-tehlé* tribe. Dimension: 0.058 × 0.016 m. (N.M. G. 5817c).